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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,075	05/31/2001	Michael Thorburn	PA-Y1031	9292
7590	01/16/2004		EXAMINER PEACHES, RANDY	
Joyce Kosinski Loral Space and Communications, Ltd. 655 Deep Valley Drive, Suite 303 Rolling Hills Estates, CA 90274			ART UNIT 2686	PAPER NUMBER 4
DATE MAILED: 01/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/871,075	THORBURN ET AL.
	Examiner Randy Peaches	Art Unit 2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,4 and 7 is/are rejected.  
 7) Claim(s) 3, 5-6, 8-10 is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

***Specification***

The disclosure is objected to because of the following informalities:

Examiner recommends to the applicant that a correction shall be made in line 5, page 5, with reference to the transmit antenna "32". The character number should be change to "22".

- a. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

1. ***Claims 4 and 7*** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding ***claim 4***, the recitation "selected ones of the pluralities of first and second switches", lacks antecedent basis. The examiner suggests that ***claim 4*** should be dependent on ***claim 3***. In this action, ***claim 4*** is treated as if it is depend on ***claim 3***.

Regarding ***claim 7***, the recitation "selected ones of the pluralities of first and second switches", lacks antecedent basis. The examiner suggests that ***claim 7*** should be dependent on ***claim 6***. In this action, ***claim 7*** is treated as if it is depend on ***claim 6***.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. ***Claim 1*** is rejected under 35 U.S.C. 102(e) as being as being anticipated by Miller et al (U.S. Publication Number 2001/0021195 A1).

Regarding ***claim 1***, Miller et al discloses a communication system (100) comprising:

- one or more gateways (122, 124) coupled to a terrestrial network.
- one or more user terminals or mobile terminals (126, 128), which reads on claimed “subscriber terminals”, that is to be coupled to a terrestrial network via a gateway (122, 124) connection or link; and
- a communication satellite (118, 120) providing forward and return communications links between the one or more gateways (122, 124) and the one or more said user terminals, as described in paragraph [0055], comprise a Mobile Telephone Switching Office (MTSO)(112), which reads on claimed “a switching network”, that selectively couples signals between selected gateways (122, 124) and selected said user terminals using predetermined satellite communication links (146, 142, 150), which reads on claimed “beams”. See paragraphs [0048],[0049].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. ***Claim 2*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al (U.S. Publication Number 2001/0021195 A1) in view of Chang et al (U.S. Publication Number 2002/0128045 A1).

Regarding ***claim 2***, according to ***claim 1***, Miller et al fails to disclose wherein the terrestrial network comprises the internet.

Chang et al (U.S. Publication Number 2002/0128045 A1) teaches in paragraph [0043] and claim number 10, that the gateway is coupled to a terrestrial network comprised of the internet.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Miller et al (U.S. Publication Number 2001/0021195 A1) to include Chang et al (U.S. Publication Number 2002/0128045 A1) in order have terrestrial network comprised of the internet to allow said user terminals accessibility to the internet for retrieval of global information.

***Allowable Subject Matter***

4. ***Claims 3, 5-6, 8-10*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding ***claim 3***, the applied reference fail to disclose or render the obvious, wherein the forward communication link implemented in the communication satellite comprises:

- a plurality of first switches that receive data transmitted from a respective plurality of gateways; one or more forward channel gateway multi-plexers selectively coupled to one of the plurality of first switches;
- a plurality of second switches selectively coupled to outputs of the plurality of first switches and selectively coupled to outputs of the one or more forward channel gateway multi-plexers; and
- one or more regional multi-plexers selectively coupled to the plurality of second switches that output data to a plurality of regions servicing the one or more subscriber terminals.

Regarding ***claim 5***, the applied reference fail to disclose or render the obvious, wherein the forward communication link implemented in the communication satellite comprises:

- a first switch for receiving data transmitted from a first gateway; a third switch for receiving data transmitted from a second gateway;
- a forward channel gateway multi-plexer coupled to the first switch;
- a second switch coupled to the first switch and to a first output of the forward channel gateway multi-plexer;
- a fourth switch coupled to the third switch and to a second output of the forward channel gateway multi-plexer;
- a first multi-plexer coupled to the second switch that outputs data to a first plurality of regions; and
- a second multi-plexer coupled to the fourth switch that outputs data to a second plurality of regions.

Regarding **claim 6**, the applied reference fail to disclose or render the obvious, wherein the return communication link implemented in the communication satellite comprises:

- one or more regional multi-plexers that receive data transmitted from subscriber terminals located in a plurality of regions;
- a plurality of third switches respectively coupled to the one or more regional multi-plexers;
- one or more return channel gateway multi-plexers selectively coupled to the plurality of third switches; and

- a plurality of fourth switches selectively coupled to the one or more return channel gateway multi-plexers and plurality of third switches that output data to the one or more gateways

Regarding **claim 8**, the applied reference fail to disclose or render the obvious, wherein the return communication link implemented in the communication satellite comprises:

- a first multi-plexer for receiving data transmitted from a first plurality of regions;
- a second multi-plexer for receiving data transmitted from a second plurality of regions;
- a first switch coupled to the first multi-plexer;
- a second switch coupled to the second multi-plexer;
- a return channel gateway multi-plexer selectively coupled to the first and second switches;
- a third switch selectively coupled to the first switch and the return channel gateway multi-plexer that outputs data to a first gateway; and
- a fourth switch coupled to the third switch that outputs data to a second gateway.

Regarding **claim 9**, the applied reference fail to disclose or render the obvious, wherein each communication link implemented in the communication satellite comprises:

- one or more first switches that communicate with corresponding gateways;

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- one or more gateway multi-plexers coupled to the one or more first switches; one or more second switches selectively coupled to the one or more gateway multi-plexers and selectively coupled to the one or more first switches; and
- one or more regional multi-plexers coupled to the one or more second switches that communicate with plurality of regions.

5. ***Claims 4 and 7*** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-5576.

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Randy Peaches

January 6, 2004



**NGUYEN T. VO**  
**PRIMARY EXAMINER**